APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,485	05/31/2001	Hovhannes Ghukasyan	HPLA.005US0	8744

28661 7590 12/03/2003	EXAMINER
SIERRA PATENT GROUP, LTD. P O BOX 6149 STATELINE, NV 89449	PHAM, HUNG Q

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	09/871,485	GHUKASYAN ET AL.
	Examiner	**Art Unit**	
	HUNG Q PHAM	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*22 September 2003*</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-10* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 09/22/2003 have been fully considered but

they are not persuasive.

As argued by applicants on pages 5 and 6:

> *In order to prove prima facie obviousness, the Examiner must provide evidence in the prior*
> *art of a motivation to combine or modify a reference, a reasonable expectation of success,*
> *and a teaching of each and every claimed element.*
> *If the Examiner wishes to maintain this rejection, Applicants request that the Examiner*
> *provide an affidavit or prior art as evidence as to why the above statement is a motivation to*
> *combine. If the Examiner cannot provide an affidavit or prior art showing the motivation to*
> *modify, this rejection must be removed.*

In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the step Suver does not explicitly teach is *updating said data*

dictionary to include said identifications and information of said new table and new

parameters. However, as taught by Suver, the database system using database

commands in basic SQL to manipulate the database such as ALTER TABLE, CREATE

TABLE, CREATE VIEW, DELETE FROM, INSERT INTO, SELECT FROM, UPDATE,

and SET (Col. 18, lines 1-22). As shown in FIG. 12, after receiving the command at step

1204, and if the command is to update schema at step 1206, the step would be carried

out by adding data types, adding new columns to the schema, etc (Col. 20, line 35-Col.

21, line 17). As seen, if the command is CREATE TABLE, obviously, *a new table* is

created with new column names as *parameters*. As shown in FIG. 13 is the method of

loading an object-relational database and corresponding database schema, and at step

1315, the in-memory database dictionary that relates schema names to tables or data

types, column names, column identifiers, etc. is populated in preparation for accessing

operations (Col. 21, lines 30-47). As seen, if a new table is created as discussed above,

obviously, *data dictionary is* populated with the new one as *updated* accordingly to the

schema table of FIG. 4 *to include said identifications and information of said new table and*

new parameters.

As argued by applicants on page 6:

> *The claimed data importer is for entering data from another software application into a*
> *table. A data importer has nothing to do with changing the method of storing the data in a*
> *database, i.e. taking information from the object and converting to table form.*

In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., *The claimed data importer is for entering data from another software application into a table*) are

not recited in the rejected claim(s). Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re*

Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   **Claims 1-10 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Suver [USP 6,016,497].

Regarding to claim 1, Suver teaches a method and system of accessing and

storing information embedded in a column of a database row for complex data, which is

logically multi-valued or hierarchical. As shown in FIG. 9 is *a data dictionary* of the table

schema of FIG. 4 for embedding information from Phones Table into the Phone column

of Customers Table of FIG. 6. The data dictionary includes table names as

identifications of related groups of tables in a database, column information as *information*

of tables in said related groups, and column IDs for column names as *identifications of*

parameters of said related groups. As shown in FIG. 5 is the technique of *receiving an input*

including data to be imported into said database, wherein different rows within physical

storage are delimited by square brackets [ ]. Data elements comprising structures are

delimited by curly braces { } such as phone number (Col. 10, line 32-Col. 11, line 17;

Col. 11, lines 40-44). As seen, the curly brace delimiter indicates *an indication of one of*

said related groups that is associated with said data. Suver further discloses a collection of

data items is identified by a column identifier and delimited by a column delimiter (Col.

11, lines 30-33) as *indications of parameters associated with said data*. As shown in FIG. 6

is a collection of data from the physical data row 501 of FIG. 5 as discussed above, and

under the Phones column is an embedded new table from Phones table schema (Col.

11, lines 17-19, and Col. 11, line 51-Col. 12, line 16). In other words, FIG. 6 performs

the claimed *appending one or more portions of said data associated with existing parameters*

to corresponding one or more existing tables associated with said existing parameters and

having tables of said one of said related groups as references; appending data associated with

new parameters to a new table created for said new parameters. Suver does not explicitly

teach the step of *updating said data dictionary to include said identifications and*

information of said new table and new parameters. However, as taught by Suver, the

database system using database commands in basic SQL to manipulate the database

such as ALTER TABLE, CREATE TABLE, CREATE VIEW, DELETE FROM, INSERT

INTO, SELECT FROM, UPDATE, and SET (Col. 18, lines 1-22). As shown in FIG. 12,

after receiving the command at step 1204, and if the command is to update schema at

step 1206, the step would be carried out by adding data types, adding new columns to

the schema, etc (Col. 20, line 35-Col. 21, line 17). As seen, if the command is CREATE

TABLE, obviously, *a new table* is *created with new* column names as *parameters*. As

shown in FIG. 13 is the method of loading an object-relational database and

corresponding database schema, and at step 1315, the in-memory database dictionary

that relates schema names to tables or data types, column names, column identifiers,

etc. is populated in preparation for accessing operations (Col. 21, lines 30-47). As seen,

if a new table is created as discussed above, obviously, *data dictionary is updated to*

include said identifications and information of said new table and new parameters.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify the Suver system by including the step of updating data

dictionary using the CREATE TABLE, and INSERT INTO command to embed a table

into another table.

Regarding to claim 2, Suver teaches all the claimed subject matters as discussed

in claim 1, Suver further discloses *a query front-end providing a parameter tree to be*

displayed to users for facilitating database queries, wherein said data dictionary further

includes information for said parameter tree, and said data importer further updates said

information for said parameter tree to include information of said new table and new

parameters (Col. 21, lines 30-46).

Regarding to claim 3, Suver teaches all the claimed subject matters as discussed

in claim 1, Suver further discloses *data dictionary has a reference groups table for storing*

indications of related groups of tables, and including columns for reference groups

identifications and reference groups names (FIG. 9).

Regarding to claim 4, Suver teaches all the claimed subject matters as discussed

in claim 1, Suver further discloses *data dictionary has a references table for storing*

information of reference tables for individual of said related group of tables (FIG. 9).

Regarding to claim 5, Suver teaches all the claimed subject matters as discussed

in claim 1, Suver further discloses *data dictionary has a parameters table for storing*

information of parameters associated with individual of said related group of tables (FIG. 9).

Regarding to claim 6, Suver teaches all the claimed subject matters as discussed

in claim 2, Suver further discloses *data dictionary has a folders table for storing*

information of a parameter tree to be provided to said query front-end (Col. 12, lines 37-49).

Regarding to claim 7, Suver teaches all the claimed subject matters as discussed

in claim 6, Suver further discloses *data dictionary has a parameters table for storing*

information of parameters associated with individual of said related group of tables (FIG. 9).

Regarding to claim 8, Suver teaches all the claim subject matters as discussed in

claim 7, Suver further discloses *data dictionary has a parameters-to-folders mapping table*

for mapping said information of parameters to corresponding information in said folders table

(Col. 12, lines 37-49).

Regarding to claim 9, Suver teaches a method and system of accessing and

storing information embedded in a column of a database row for complex data, which is

logically multi-valued or hierarchical. As shown in FIG. 5 is the technique of *receiving an*

input including data to be imported into said database, wherein different rows within

physical storage are delimited by square brackets [ ]. Data elements comprising

structures are delimited by curly braces { } such as phone number (Col. 10, line 32-Col.

11, line 17; Col. 11, lines 40-44). As seen, the curly brace delimiter indicates *an*

indication of one of said related groups that is associated with said data. Suver further

discloses a collection of data items is identified by a column identifier and delimited by a

column delimiter (Col. 11, lines 30-33) as *indications of parameters associated with said*

data. As shown in FIG. 6 is Customer table 601 with the columns Name, City, State, Zip

Code, Address, and Phones by implementing the schema of FIG. 4. In column 608g is a

separate Phones "sub-table" 603, which comprises PhoneType and PhoneNumber of

Phones table schema (Col. 9, line 58-Col. 10, line 8). As shown in FIG. 9 is a data

dictionary of the table schema of FIG. 4 for embedding information from Phones Table

into the Phone column of Customers Table of FIG. 6. The data dictionary includes

related groups of tables in a database (Col. 14, line 61-Col. 15, line 12). As seen, *a set*

of existing Name, City, State, Zip Code, Address, and Phones as *parameters and a set of*

PhoneType and PhoneNumber as *new parameters from said parameters associated with*

data are *formed*, and *based upon parameter information stored in a data dictionary for said*

related group of tables. Again the data in FIG. 6 of Suver performs the claimed *appending*

one or more portions of said data associated with said set of existing parameters to

corresponding one or more existing tables having said related groups of tables as references in

said database; importing a remaining portion of said data associated with said set of new

parameters to a new table created for said new parameters. Suver does not explicitly teach

the step of *appending data associated with new parameters to a new table created for said*

new parameters, and *updating said data dictionary to include said identifications and*

information of said new table and new parameters. However, as taught by Suver, the

database system using database commands in basic SQL to manipulate the database

such as ALTER TABLE, CREATE TABLE, CREATE VIEW, DELETE FROM, INSERT

INTO, SELECT FROM, UPDATE, and SET (Col. 18, lines 1-22). As shown in FIG. 12,

after receiving the command at step 1204, and if the command is to update schema at

step 1206, the step would be carried out by adding data types, adding new columns to

the schema, etc (Col. 20, line 35-Col. 21, line 17). As seen, if the command is CREATE

TABLE, obviously, *a new table* is *created with new* column names as *parameters*. As

shown in FIG. 13 is the method of loading an object-relational database and

corresponding database schema, and at step 1315, the in-memory database dictionary

that relates schema names to tables or data types, column names, column identifiers,

etc. is populated in preparation for accessing operations (Col. 21, lines 30-47). As seen,

if a new table is created as discussed above, obviously, *data dictionary is updated to*

include said identifications and information of said new table and new parameters.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify the Suver system by including the step of updating data

dictionary using the CREATE TABLE, and INSERT INTO command to embed a table

into another table.

Regarding to claim 10, Suver teaches all the claimed subject matters as

discussed in claim 9, Suver further discloses the step of *identifying said one or more*

existing tables having said related group of tables as references in said database from

information in said data dictionary linking said one or more existing tables to said existing

parameters (Col. 14, lines 14-23).

Conclusion

4.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of

time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within
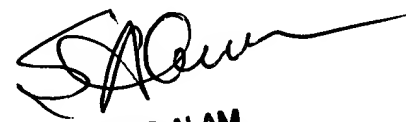
TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-

4242. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, KIM Y VU can be reached on 703-305-4393. The fax phone number for the

organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

Examiner Hung Pham
November 21, 2003

SHAHID ALAM
PRIMARY EXAMINER